MACWALL LANDMARK

SITE PREPARATION

1) Set out line and level of wall in preparation for foundation excavation. Excavate trench to minimum dimensions indicated on engineering cross section, typically 300mm min. depth and 750mm min. width. For ease of construction commence construction at the lowest point on the wall.

2) Place a good quality granular fill (eg. DMRB Type 1) in the trench in 150mm layers and compact to achieve suitable density, typically 95% max. dry density (Figure 2). Repeat the process until the required base thickness is achieved. Check to ensure that the foundation surface is level in readiness to receive the base course of blocks.

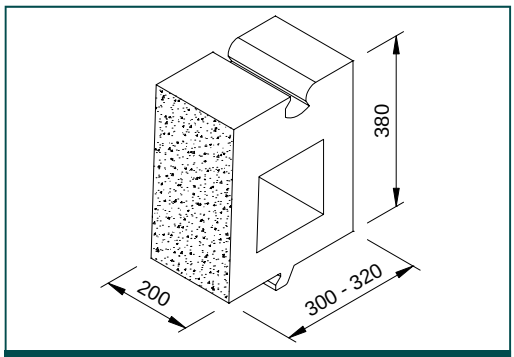

Figure 1

FOUNDATION COURSE & DRAINAGE

3) Place the foundation blocks on the prepared foundation (Fig. 3). Position the units side by side, in full contact with the foundation. On straight wall construction, placing a string line against the back of the units helps maintain alignment. Check level in both directions. Backfill immediately behind and in front of the blocks with granular fill & compact. For taller walls it may be convenient to place the base course in a foundation of lean-mix concrete. Recheck the level & alignment in both directions. NOTE: Errors in the accuracy of the position of the foundation units will significantly affect the alignment of the wall units in later stages of construction.

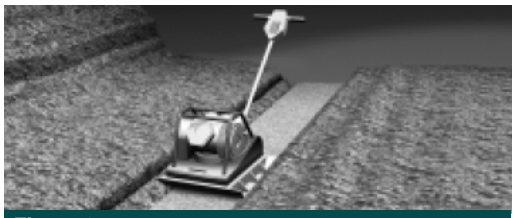
Figure 2

4) Once the compacted foundation is in place and the foundation course completed, construction of the first course of blocks may commence (Figure 4). Sweep off the foundation course, making sure that the tops of the units are free from debris. Place the new course on the foundation course pulling each unit forward to engage the lock flange. Units should be set flush together at the face with no spaces between them.


Figure 3

5) Place a perforated, flexible drainpipe directly behind the units (Figure 5). As an alternative, the drainpipe can be daylighted through the face of the wall. The pipe must be cut and have a 'T' fitting attached to it. Part of a face unit should be cut to allow the 'T' to daylight through the face of the wall. Place 300mm of free draining aggregate directly behind the wall and over the drainpipe. Once the drainage installation is complete, the main wall construction can commence.


Figure 4

WALL CONSTRUCTION

6) Sweep off each course, making sure that the tops of the units are free from debris and construct the subsequent course of the wall by 'centering' a unit directly above the vertical joints of the course below (Running Bond). Pull each unit forward to engage the lock flange.

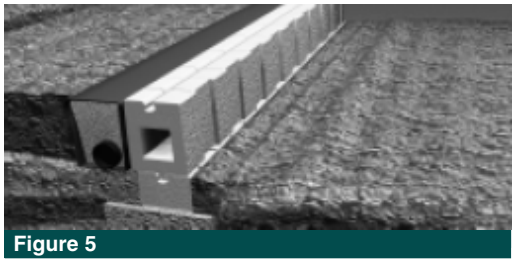
Figure 5

7) Place a free draining aggregate directly behind the blocks to form a drainage column. When the construction drawings show a geotextile required between the drainage aggregate and the reinforcement soil fill, considerations should be given to using temporary lightweight timber shuttering. The shuttering is removed prior to laying a geogrid layer.

8) Fill all the remaining area behind the drainage aggregate with a suitable granular fill. The fill should be placed in layers not exceeding 300mm and compacted to achieve a suitable density, typically 95% max. dry density.


Figure 6

9) Where Enkagrid PRO is required, cut the geogrid to the appropriate length shown on the drawings. Place the geogrid flat over the com-

pacted backfill and to within 25mm of the front face of the block. Place stone weight on the geogrid to keep in position. Place the lock bar into the locking channel, flat side up and angled side to the back of block. Maintain the reinforcement within 25 mm of front face of the block (Figure 7). Ensure that the geogrid is taught and flat on the compacted surface prior to placing of subsequence granular layers or block courses. NOTE: the geogrid is always placed with the roll direction (direction of strength) perpendicular to the wall face. When filling over the geogrid, a minimum of 100mm of fill must be placed over the geogrid before driving plant over it.

10) Repeat steps 6 to 9 until designed height is achieved, introducing Enkagrid PRO at the levels shown on the construction drawings.

11) Finish the wall as shown in the construction drawings. Placement of caps will vary according to the wall design, and for tall walls or where a barrier is required , a reinforced concrete capping detail may need to be developed. Contact Maccaferri for further information.

FINISHING DETAILS

The finishing detail for MacWall Landmark structures can have a significant influence on the overall appearance of the structure. A number of finishing ideas and methods are available upon request. These include steps in the wall elevation, corners, curves, steps and graded walls. Contact Maccaferri for further information.

NOTES:

- For walls greater than 1.5m in height engineering advice should be sought.
- All walls should be constructed upon competent ground. Although segmental walls can accommodate some movement, additional measures may be required in poor ground.
- Careful consideration of the finishing details result in the best looking walls.

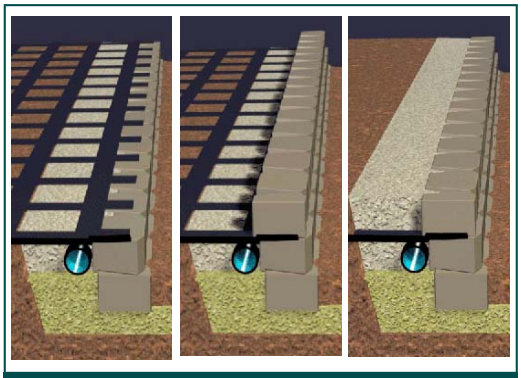

Figure 7

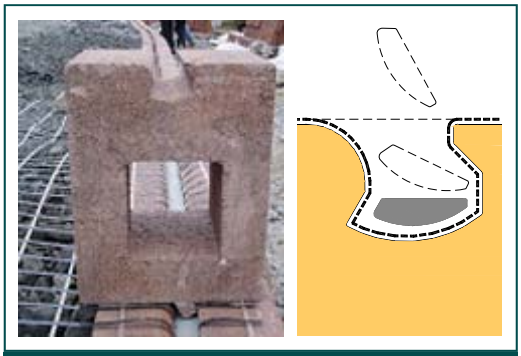

Figure 8

Figure 9

Figure 10

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